

REC'D PLI/PIU 48 FEB 2006

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/526,113	
	Filing Date	September 1, 2003	
	First Named Inventor	Mariagrazia PIZZA	
	Art Unit	Not Yet Assigned	
	Examiner Name	Not Yet Assigned	
Total Number of Pages in This Submission	14	Attorney Docket Number	223002100800

ENCLOSURES (Check all that apply)						
<input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate, 2 pages)	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC				
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences				
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)				
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information				
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter				
<input checked="" type="checkbox"/> Extension of Time Request (1 page)	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):				
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	1. Notification of Missing Parts (copy, 2 pages)				
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	2. Declaration (signed, 3 pages)				
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	3. Statement Pursuant to 37 CFR 1.821(f) (2 pages)				
<input checked="" type="checkbox"/> Reply to Missing Parts/Incomplete Application		4. Sequence Listing (paper copy, 3 pages)				
<input checked="" type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		5. One (1) Disk Containing Sequence Listing				
<table border="1"><tr><td>Remarks</td><td>Other Encl's (con't)</td></tr><tr><td colspan="2">6. Return Receipt Postcard</td></tr></table>			Remarks	Other Encl's (con't)	6. Return Receipt Postcard	
Remarks	Other Encl's (con't)					
6. Return Receipt Postcard						

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	MORRISON & FOERSTER LLP (Customer No. 20872)		
Signature			
Printed name	Otis Littlefield		
Date	February 28, 2006	Reg. No.	48,751

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV790047626US, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: February 28, 2006

Signature: (Valerie Cohen)



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PTO/SB/17 (12-04v2)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL For FY 2005		Complete if Known	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	10/526,113
		Filing Date	September 1, 2003
		First Named Inventor	Mariagrazia PIZZA
		Examiner Name	Not Yet Assigned
		Art Unit	Not Yet Assigned
TOTAL AMOUNT OF PAYMENT		Attorney Docket No.	223002100800
(\$)		1,150.00	

METHOD OF PAYMENT (check all that apply)	
<input type="checkbox"/> Check	<input type="checkbox"/> Credit Card
<input type="checkbox"/> Money Order	<input type="checkbox"/> None
<input type="checkbox"/> Other (please identify): _____	
<input checked="" type="checkbox"/> Deposit Account	Deposit Account Number: <u>03-1952</u> Deposit Account Name: <u>Morrison & Foerster LLP</u>
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below	<input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17	<input checked="" type="checkbox"/> Credit any overpayments

FEE CALCULATION							
1. BASIC FILING, SEARCH, AND EXAMINATION FEES							
	FILING FEES		SEARCH FEES		EXAMINATION FEES		
<u>Application Type</u>	<u>Fee (\$)</u>	<u>Small Entity Fee (\$)</u>	<u>Fee (\$)</u>	<u>Small Entity Fee (\$)</u>	<u>Fee (\$)</u>	<u>Small Entity Fee (\$)</u>	<u>Fees Paid (\$)</u>
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
2. EXCESS CLAIM FEES							
<u>Fee Description</u>	<u>Fee (\$)</u>	<u>Small Entity Fee (\$)</u>					
Each claim over 20 (including Reissues)	50	25					
Each independent claim over 3 (including Reissues)	200	100					
Multiple dependent claims	360	180					
<u>Total Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>			
18	- 20 = 0	x 50 =	0.00	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>		
				360	0.00		
<u>Indep. Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>				
7	- 7 = 0	x 200 =	0.00				
3. APPLICATION SIZE FEE							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>			
	- 100 =	/50	(round up to a whole number) x	=			
4. OTHER FEE(S)							
Non-English Specification, \$130 fee (no small entity discount)							
Other (e.g., late filing surcharge): 1051 Surcharge-Late oath or declaration				130.00			
1253 Extension for response within third month				1,020.00			

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent)	48,751
Name (Print/Type)	Otis Littlefield	Telephone	(415) 268-6846
		Date	February 28, 2006

03/07/2006 MKAYPAGH 00000099 031952 10526113

01 FC:1617 130.00 DA

sf-2087402



PATENT

Atty. Dkt. No. PAT051720-US-PCT

IPW

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First class mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the below-identified date.

28 September 2010
Date

KL
Kara Shure

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Mariagrazia Pizza et al.

Serial No.: 10/526,113

Group Art Unit: 1751

Filed: February 28, 2005

Confirmation No.: 8533

For: IMPROVED BACTERIAL OUTER MEMBRANE VESICLES

REQUEST FOR CORRECTED FILING RECEIPT

Mail Stop Amendment
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

Attached is a copy of the Filing Receipt received from the U.S. Patent and Trademark Office in the above application for which issuance of a corrected filing receipt is respectfully requested.

Please delete the following data in the "Title" section: "Bacterial outer memberane vesicles" and insert therefore "Improved bacterial outer membrane vesicles."

Please correct the applicant status from **SMALL ENTITY** to Large Entity status.

Please correct the "Filing or 371(c) Date" from "02/28/2006" to "02/28/2005."

Attached is a copy of the Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371 providing evidence of the correct, title, applicant status and filing date.

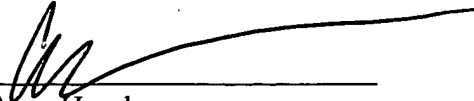
The Commissioner is hereby authorized to charge any fee in connection with this Request to Deposit Account No. 03-1664.

Respectfully submitted,

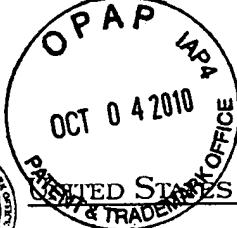
Dated: _____

9/27/10

By: _____


Amy Hessler
Reg. No. 50,310

NOVARTIS VACCINES AND DIAGNOSTICS, INC.
Intellectual Property Dept. – X 100B
4560 Horton Street
Emeryville, CA 94608
Telephone: (510) 923-3833
Facsimile: (510) 655-3542



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

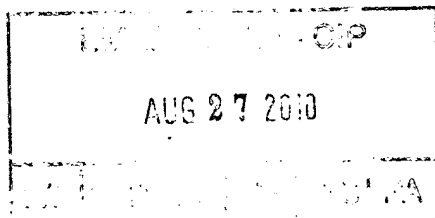
United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/526,113	02/28/2006 02/28/2005	1751	825	PP019743.0003	2	18	2

27476
Chiron Corporation
Intellectual Property - R440
P.O. Box 8097
Emeryville, CA 94662-8097



CONFIRMATION NO. 8533

FILING RECEIPT



OC000000018591321

Date Mailed: 04/21/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Mariagrazia Pizza, Siena, ITALY;
Davide Serruto, Siena, ITALY;
Rino Rappuoli, Castelnuovo, ITALY;

Power of Attorney: The patent practitioners associated with Customer Number 27476.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/IB03/04293 09/01/2003

Foreign Applications

UNITED KINGDOM 0220194.5 08/30/2002

Projected Publication Date: 07/27/2006

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY **** **LARGE ENTITY**

Title

8/21/10
ALH
PAT 051720-US-PC

Bacterial outer membrane vesicles Bacterial outer membrane vesicles

Preliminary Class

510

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR

1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE
(REV. 12-2004)

TRANSMITTAL LETTER TO THE UNITED STATES

DESIGNATED/ELECTED OFFICE (DO/EO/US)

CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

INTERNATIONAL APPLICATION NO. **PCT/IB2003/004293**

INTERNATIONAL FILING DATE **1 September 2003**

ATTORNEY'S DOCKET NUMBER

PP019743.0003

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

Unassigned

10/526113

PRIORITY DATE CLAIMED

30 August 2002

TITLE OF INVENTION

IMPROVED BACTERIAL OUTER MEMBRANE VESICLES

APPLICANT(S) FOR DO/EO/US

Mariagrazia PIZZA, Davide SERRUTO, Rino RAPPUOLI

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☒ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☐ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).
11. ☒ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☒ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. **EV351355916US**
23. ☒ Other items or information:

postcard, cheque and copy of unsigned Declaration for Patent Application

COPY

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U.S. APPLICATION NO. (if known, see 37 CFR 1.51) 10/526113		INTERNATIONAL APPLICATION NO. PCT/IB2003/004293		ATTORNEY'S DOCKET NUMBER PP019743.0003	
24. The following fees are submitted:				Applicant use	Office use
<input checked="" type="checkbox"/> a) Basic national fee \$300.00				\$ 300.00	
<input checked="" type="checkbox"/> b) Examination fee \$200.00				\$ 200.00	
<input checked="" type="checkbox"/> c) Search fee \$500.00				\$ 500.00	
TOTAL OF ABOVE CALCULATIONS = \$1000.00				\$ 1,000.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE		
19 - 100 =	-81 /50 =	-1	x \$250.00	\$ (\$250.00)	
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	18 - 20 =	0	x \$50.00	\$ \$0.00	
Independent claims	2 - 3 =	0	x \$200.00	\$ \$0.00	
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00				\$ \$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$ 750.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ \$0.00	
SUBTOTAL =				\$ 750.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ \$0.00	
TOTAL NATIONAL FEE =				\$ 750.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				\$ \$0.00	
TOTAL FEES ENCLOSED =				\$ 750.00	
Amount to be refunded:				\$	
Amount to be charged:				\$	
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>750.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is c. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>03-1664</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO: CHIRON CORPORATION Intellectual Property-R338 P.O. Box 8097 Emeryville, California 94662-8097 US Customer No. 27476					
				SIGNATURE <u>Rebecca M. Hale</u> NAME <u>45,680</u> REGISTRATION NUMBER	